Docket No.: 18264 (64095201)
Application No.: 10/736,662
Reply to Office Action mailed August 28, 2006

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Please cancel claims 1, 2, 4-7.

1. (cancelled) A method of detecting the premature rupture of amniotic membrane comprising testing vaginal fluid for pH and determining a result as an irreversible change in a testing medium.
2. (cancelled) The method of claim 1 wherein said irreversible change is a color change.
3. (cancelled) The method of claim 1 wherein said irreversible change is production of a hydrogel.
4. (cancelled) The method of claim 2 wherein said testing for pH is performed using liposomes that undergo an irreversible hyperchromic spectral shift in response to an elevated environmental pH.
5. (cancelled) The method of claim 4 wherein said elevated pH is a pH of at least 6.
6. (cancelled) The method of claim 4 wherein said elevated pH is a pH of at least 7.
7. (cancelled) The method of claim 4 wherein said liposomes are selected from the group consisting of 10,12-pentacosadiynoic acid derivatized with glutamic acid, and 3-(dimethylamino)propylamine.

Claims 3, 8-27, were previously withdrawn.

Please enter the following new claims 28-41.

28. (New) A method for detecting premature rupture of amniotic membrane, the method comprising: testing a sample of vaginal secretion for pH using a first visual indicator that results in an irreversible change and detecting using the first or a second visual indicator for a relative presence in said vaginal secretion of at least one of the following species: a) hydrogen-peroxide (H_2O_2) level, b) analytes specific to amniotic fluid, c) cholesterol, d) or a combination of a), b) or c) species.
29. (New) The method according to claim 28, wherein said vaginal secretion has a pH-level greater than 5 during pregnancy.
30. (New) The method according to claim 28, wherein said H_2O_2 level is detected with a hydrogen-peroxide-mediated enzymatic and non-enzymatic conversion of chromophores.
31. (New) The method according to claim 30, wherein said H_2O_2 reacts with a peroxidase-treated substrate.
32. (New) The method according to claim 28, wherein said detection indicates a relative decrease in said H_2O_2 level from normal levels.

33. (New) The method according to claim 28, wherein said method comprises testing said sample of vaginal secretion for an elevated pH-level greater than a normal vaginal pH range during pregnancy and detecting a relative decrease in said H_2O_2 level from normal levels.

34. (New) The method according to claim 33, wherein said pH-level is at least 6.

35. (New) The method according to claim 28, wherein said analytes include: alkaline phosphatase, diamine oxidase, monoamine oxidase, pepsinogen, alpha-galactosidase, alpha-fucosidase, amylase, alpha-mannosidase, lysozyme, phosphatidic acid, phosphohydrolase, fetal fibronectin, alpha fetoprotein, collagen-breakdown products, estradiol, active ceruloplasmin, aderenomedullin, insulin-like growth factor-binding protein, inhibin B, human chorionic gonadotroprin, human placental lactogen, granulocyte elastase, prolactin, fructose-based fatty acids, phospholipids, lecithin, uric acid, urea, creatinine and rennin.

36. (New) The method according to claim 28, wherein said cholesterol is present in a concentration range of about 20-100mg/L.

37. (New) The method according to claim 28, wherein either said cholesterol or said analytes in amniotic fluid results in a visible color change on a detecting apparatus.

38. (New) The method according to claim 37, wherein said color change for cholesterol detection involves a series of enzyme-based reactions including 4-aminoantipyrine.

39. (New) The method according to claim 28, further comprising: detecting amniotic fluid analyte in vaginal secretion by depositing a ligand receptor for an analyte in a first area of a feminine hygiene product, depositing a receptor specific to an alternate site on the analyte in a second area of said pad, and testing for pH by depositing cross-linked liposomes in a third area of said hygiene product, wherein fluid entering said product is channeled to the ligand receptor deposit, then to the alternate site receptor and then to the third area of said product, resulting in a visual indication of premature rupture of membrane.

40. (New) The method according to claim 28, further comprising: encapsulating an analyte sensitive dye within a capsule made from a pH sensitive encapsulating material with a pKa greater than 6.5 and less than 7, wherein said capsule releases said analyte sensitive dye and said dye changes color in amniotic fluid.

41. (New) The method according to claim 28, further comprising: encapsulating a pH sensitive dye within a capsule made from an analyte sensitive encapsulating material, wherein said capsule releases said pH sensitive dye and said dye changes color in amniotic fluid.